



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,167	07/11/2001	Kenichiro Suetsugu	43888-112	7945
20277	7590	01/24/2006	EXAMINER	
MCDERMOTT WILL & EMERY LLP			PHAN, THIEM D	
600 13TH STREET, N.W.			ART UNIT	
WASHINGTON, DC 20005-3096			PAPER NUMBER	

3729

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,167

Applicant(s)

SUETSUGU ET AL.

Examiner

Tim Phan

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,8,11-14 and 21 is/are pending in the application.
- 4a) Of the above claim(s) 11-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,8,14 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/31/05
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on 10/06/05 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The language "... identification information is recognizable by a human." is vague and indefinite. It is confused and unclear if and how the information or record or database is recognizable or analyzed directly by a human.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6, 8, 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asao et al (JP07-326834) in view of Nakatsuka et al (US 5,942,185).

As applied to claim 6, Asao et al teach an article or printed circuit board imprinted with displayed codes (Drawing 1, 2; Abstract) about material of the article such as bar code 2 (Abstract; Detailed Description, Paragraph 8, line 1) with 5 different digits (first 2 digits, second 3 digits, ..., fifth 8 digits) where the first digits identify or mark an absolute magnitude number (Detailed Description, Paragraphs 8 & 9, Table 1) from 5 (heavily lead doped) to 0 which is judged to be lead free for land burying (Detailed Description, Paragraph 8, line 6), or apart from the PCB bar code the article has some IC carrying information or identification about the PCB (Detailed Description, Paragraph 20, lines 4-10), where the motivation is to simplify the recycling of used parts (Paragraph 21).

Nakatsuka et al teach a lead free solder with information about different compositions, kind of soldered parts, that are low in cost, stably supplied or available to the PCB industry and do not damage the environment (Abstract).

It would be obvious to one of ordinary skill in the art at the time the invention was made

to combine the two teachings by applying the information of the lead free solder as taught by Nakatsuka et al to PCB identification of Asao et al, in order to speed up and simplify the recycling of used parts without harming the environment.

As applied to claims 8 and 21, Asao et al teach a bar code or labeling (Detailed Description, Paragraph 8, line 1) imprinted on the printed circuit board for information about material of the article for recycling or apart from the PCB bar code the article has some IC carrying information or identification about the PCB (Detailed Description, Paragraph 20, lines 4-10), except for having the bar code or IC identification or information imprinted on the housing which accommodates the printed circuit board or article.

Nakatsuka et al teach a lead free solder with information about different compositions, kind of soldered parts, that are low in cost, stably supplied or available to the PCB industry and do not damage the environment (Abstract).

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the information of the lead free solder as taught by Nakatsuka et al to the bar code or labeling of Asao et al, and have it imprinted on the housing which accommodates the printed circuit boards or articles or have it imprinted to the box carrying these housings or the trucks, the trains or boats, etc ... carrying these boxes in order to speed up and simplify the recycling of used parts without harming the environment.

As applied to claim 14, as best understood, Asao et al teach that the identification

information is provided by the bar code or some IC and it is well known and obvious to one of ordinary skill in the art to recognize that the identification information by IC can be expanded to a RAM, EPROM, EEPROM or memory IC or the like to accommodate larger data information, which can be recognizable by a technician for data retrieving through a memory reader device.

Response to Arguments

6. Applicants' arguments with respect to claims 6, 8, 14 and 21, filed on 10/06/05, have been considered but are moot in view of the new grounds of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M - F, 9AM - 5PM.

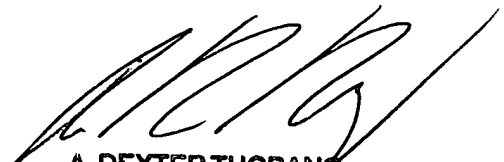
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tim Phan
Examiner
Art Unit 3729

tp
January 20, 2006



A. DEXTER TUGBANG
PRIMARY EXAMINER